

CLAIMS

1. A usage control apparatus for controlling use of a device, comprising:
 - 5 a holding module configured to hold money information requested when the device is made to perform a process that uses the device for predetermined usage; and
 - a transmitting module configured to transmit the money information to the device at the time of processing by the device.
- 10 2. A usage control apparatus according to Claim 1, wherein the transmitting module transmits process data for processing by the device to the device.
- 15 3. A usage control apparatus according to Claim 2, further comprising a controller configured to control whether the processing may proceed or not, by comparing an amount of processing specified by the process data, with an allowable amount of processing indicated by the money information.
- 20 4. A usage control apparatus according to Claim 2, further comprising a money information updating module configured to update the money information according to an amount of processing specified by the process data.
- 25 5. A usage control apparatus according to Claim 2, wherein the transmitting module transmits the money information in an amount required for an amount of processing specified by the process data.
6. A usage control apparatus according to Claim 2, wherein the transmitting module transmits the money information held by the holding module; and
 - the usage control apparatus further comprises

a receiving module which receives from the device an updated value of the money information updated according to an amount of processing specified by the process data.

5 7. A usage control apparatus according to Claim 2, wherein the device is a printer, and the process data is print data.

8. A usage control apparatus according to Claim 1, wherein the holding module acquires and holds the money information from a server connected via a network.

10 9. A usage control apparatus according to Claim 8, wherein the holding module notifies the server of an amount of money information that has not been used.

15 10. A usage control apparatus according to Claim 1, wherein the money information includes control information which is usable for determining whether the money information is useable; and

the usage control apparatus further comprises:

20 a transmission controller which decides, based on the control information, whether the money information is useable, and if the money information is not useable, prohibits transmission of the money information.

11. A usage control apparatus according to Claim 1, wherein the money information is coin information permitting unit-based use of the device.

25 12. A usage control apparatus according to Claim 1, wherein the usage is established based on at least one selected from an amount of data processed by the device; consumed amount of an expendable consumed by the device; duration of use of the device; power consumed by the device; ; and number of times of use of the device.

13. A usage control apparatus for using a device for which predetermined money information is requested depending on usage, the usage control apparatus comprising:

a holding module configured to acquire, from a server connected to the usage

5 control apparatus via a network, money information in an amount requested for using the device by a predetermined amount, and to hold the money information; and

a transmitting module configured to transmit to the device process data for processing by the device;

10 wherein the transmitting module further transmits to the device, from the money information held by the holding module, the money information in at least an amount requested for causing the device to process the process data.

14. A usage control apparatus according to Claim 13, wherein the transmitting

15 module transmits to the device, together with the process data, the money information in an amount requested for causing the device to process the process data; and

the usage control apparatus further comprises

20 an updating module which updates the money information held in the holding module by deducting the money information in an amount transmitted to the device.

15. A usage control apparatus according to Claim 13, wherein

the transmitting module transmits to the device all the money information 25 held in the holding module; and

the usage control apparatus further comprises:

20 a receiving module configured to receive from the device the money information that has been transmitted to the device and was deducted in an amount requested for causing the device to process and to store the money information in the holding module.

16. A device, comprising:

a process command receiving module configured to receive a process command from a usage control apparatus for controlling a process;

5 a decision module configured to decide whether or not to enable the process based on the process command, depending on whether money information requested when the device performs the process that uses the device for predetermined usage is held in the device and/or in the usage control apparatus; and

10 a processing module configured to perform the process, in the event that the decision module has decided to enable processing.

17. A device according to Claim 16, wherein process data targeted for the process is received as the process command.

15 18. A device according to Claim 16, further comprising:

a managing module configured to manage the money information; and

a updating module configured to update the money information depending on an amount of processing specified by the process data.

20 19. A device according to Claim 17, further comprising

a redelivery module which transmits to the usage control apparatus an updated value of the money information that has been updated according to an amount of processing specified by the process data.

25 20. A device according to Claim 17, further comprising:

an output module configured to output, on the device and/or on the usage control apparatus, an amount of money information that has been requested and used for the process, and/or

30 an amount of money information that has not been used and is held by the device and/or the usage control apparatus.

21. A device according to Claim 20, wherein
the output module, in the event of outputting the amount of unused money
information, outputs an amount of money information useable by the usage control
5 apparatus.
22. A device according to Claim 17, wherein
the device is a printer, and the process data is print data.
- 10 23. A device according to Claim 16, further comprising
a receiving module which receives the money information at the time of
execution of the process.
- 15 24. A device according to Claim 16, wherein
the money information includes control information for determining whether
the money information is useable; and
the device further comprises
a process prohibiting module which decides, based on the control
information, whether the money information is useable, and if decided not useable,
20 prohibits the process.
- 25 25. A device according to Claim 16, wherein
the money information is coin information permitting unit-based use of a
fixed usage.
26. A device according to Claim 16, wherein
the usage is established based on at least one selected from the amount of
data processed by the device; consumed amount of an expendable consumed by the
device; duration of use of the device; power consumed by the device; and number of
30 times of use of the device.

27. A device according to Claim 16, wherein
the money information is encrypted; and
the device further comprises:

5 a key holding module which holds a key capable of decrypting the
encrypted money information; and
 a decrypting module which decrypts the encrypted money information
with the key.

10 28. Device for executing a process in exchange for money information, the device
comprising:

 a holding module which
 receives, from a usage control apparatus connected to the device,
 money information in an amount for using the device for predetermined amount
15 and
 holds the money information;
 a receiving module receives process data for processing from the usage
control apparatus;
 a processing module able to execute the process; and
20 a decision module that, in the event that an amount of money information
required for processing the process data is less than an amount of money
information held in the holding module, causes the processing module to execute the
process.

25 29. A device according to Claim 28, further comprising:

 a transmitting module which transmits to the usage control apparatus money
information that has been held in the holding module and was deducted money
information in an amount required for processing of the process data.

30 30. A device according to Claim 28, further comprising

an updating module which updates the money information by deducting money information in an amount required for processing of the process data from the money information held in the holding module.

5 31. A method for controlling use of a device, comprising the steps of:
holding money information requested when the device is made to perform a process that uses the device for predetermined usage; and
transmitting the money information to the device at the time of processing by the device.

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32. A method for using a device for which predetermined money information is requested depending on usage, the method comprising the steps of::

acquiring and holding money information in an amount requested for using the device by a predetermined amount; and

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transmitting to the device process data for processing by the device;
transmitting to the device, from the money information held, the money information in at least an amount requested for causing the device to process the process data.

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33. A method for controlling a device, comprising the steps of:
receiving a process command from a usage control apparatus for controlling a process;

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deciding whether to enable a process based on the process command, depending on whether money information requested when the device performs the process that uses the device for predetermined usage is held in the device and/or in the usage control apparatus; and

performing the process, in the event that the decision module has decided to enable processing.

34. A method for executing a process in exchange for money information, the method comprising the steps of:

- receiving and holding money information in an amount requested in exchange for executing a predetermined amount of process;
- 5 receiving process data for processing;
- executing the process in the event that an amount of money information required for processing the process data is less than an amount of money information held.